| Subject | Computer Science |
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| Unit | KS4 Topic 2 |


| Key Vocabulary | Definition |
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| Binary | A representation using just $0, \mathrm{l}$, equivalent to electronic off and on. |
| Two's Complement | A way of representing positive and negative numbers in binary. The MSB is negative. |
| Denary | Base-10 numbers, used by people. 0123456789,10 |
| Hexadecimal | Base-16 numbers, easy to convert to and from binary. $0-9$, then ABCDEF before 10. |
| Overflow | When the result of an addition needs more bits to store than are available. |
| ASCII | A way of representing characters typed on the keyboard as 7bit binary codes. |
| Bitmap | An image that is made up of coloured pixels. |
| Resolution | The number of pixels in an image, the level of detail. |
| Pixel | Picture element, an individual square of one colour that makes up part of an image. |
| Compression | Reducing the size of a file by looking for repeated patterns or removing data. |
| Kilobyte | 1024 bytes - about one paragraph of text. |
| Megabyte | 1024 Kilobytes - about one minute of music. |
| Gigabyte | 1024 Megabytes - about half an hour of streamed video. |
| Terrabyte | 1024 Gigabytes - |
| Sign and Magnitude | A way of representing positive and negative numbers using binary. The MSB is +/-. |

